**GINA SPRINT**

**CPTS 111 - INTRODUCTION TO ALGORITHMIC PROBLEM SOLVING**

**(Spring Semester 2017)**

**COURSE SCHEDULE**

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| --- | --- | --- | --- | --- |
| **Week** | **Monday** | **Tuesday** | **Wednesday** | **Sunday** |
| 1 | L1-1 Intro  MA1 Scavenger Hunt  Syllabus Overview | Lab0 Environment Setup (on your own, no official lab meetings this week) | L1-2 Intro II  Read Ch. 1 (General Introduction) in How to Think Like a Computer Scientist textbook  MA1 Due |  |
| 2 | MLK Day, no class | Lab1 Intro to Python  zB Ch. 1, 2, 3 (Participation) Due | L2-2 Arithmetic  [PA1 Arithmetic (Carbot)](https://www.engage-csedu.org/find-resources/carbot)  Read Ch. 2 (Simple Python Data) and 3 (Debugging Interlude 1) |  |
| 3 | L3-1 Arithmetic II  Python Coding Standard  zB Ch. 1, 2, 3 (Challenge) Due | Lab2 Arithmetic  zB Ch. 4 (Participation) Due | L3-2 Modules  Read Ch. 5 (Python Modules) | zB Ch. 5 (Participation) Due |
| 4 | L4-1 Functions  Read Ch. 6 (Functions)  zB Ch. 4 (Challenge) Due | Lab3 Functions | L4-2 Functions II  [PA2 Functions(Google Maps Pairwise Distances)](https://www.engage-csedu.org/find-resources/google-maps-pairwise-distances)  PA1 Due | zB Ch. 5 (Participation) Due |
| 5 | L5-1 Functions III  zB Ch. 5 (Challenge) Due @ Midnight | Lab4 More Functions  Read Ch. 4 (Python Turtle Graphics)  zB Ch. 6 (Participation) Due | L5-2 Conditionals I  MA8  POGIL Overview  Read Ch. 7 (Selection) |  |
| 6 | L6-1 Conditionals II  MA9  [PA3 Conditionals (Are you a fan quiz)](https://www.engage-csedu.org/find-resources/are-you-fan-quiz)  zB Ch. 6 (Challenge) Due | Lab5 Conditionals and Review | L6-2 Review  PA2 Due |  |
| 7 |  | Lab6 More Conditionals | Exam 1 | zB Ch. 7 (Participation) Due |
| 8 | L8-1 Loops | Lab7 Loops  zB Ch. 8 (Participation) Due | L8-2 Loops II  MA11  [PA4 Loops (Game of Craps)](https://www.engage-csedu.org/find-resources/game-craps)  Read Ch. 4 (Python Turtle Graphics) and 8 (More About Iteration)  PA3 Due | zB Ch. 9 (Participation) Due |
| 9 | L9-1 Loops III  zB Ch. 7,8,9 (Challenge) Due | Lab8 More Loops | L9-2 Files  Read Ch. 11 (Files) |  |
| 10 | L10-1 Files II  MA14  zB Ch. 10 (Participation) | Lab9 Files | L10-2 Strings  PA5 Files and Strings  Read Ch. 9 (Strings)  PA4 Due |  |
| 11 | L11-1 Strings II  zB Ch. 10 (Challenge) Due | Lab10 Strings and Review | BonusPA  L11-2 Review |  |
| 12 | Exam 2 | Lab11 More Strings  zB Ch. 11 (Participation) Due | L12-2 Lists  [PA6 Lists (PPM Image Modifier)](https://www.engage-csedu.org/find-resources/ppm-image-modifier)  Read Ch. 10 (Lists)  PA5 Due |  |
| 13 | L13-1 Lists II  zB Ch. 11 (Challenge) Due | Lab12 Lists | L13-2 Lists III  MA20 |  |
| 14 | L14-1 Binary | [Lab13 Lists, Tuples, Hardware (Lightboard Lab](https://www.engage-csedu.org/find-resources/lightboard-lab))  zB Ch. 12 (Participation) Due | L14-2 Dictionaries  Read Ch. 12 (Dictionaries)  [PA7 (Game of Student’s Choice)](https://www.engage-csedu.org/find-resources/game-students-choice)  MA20 Due |  |
| 15 | L15-1 Review  zB Ch. 12 (Challenge) Due | Lab14 Dictionaries and Review | L15-2 Fun CS Stuff!  PA6 Due |  |
| 16 | Section 01 Final | Section 03 Final |  |  |